

December 9, 2008

**VIA Electronic Submission**

Chair Nichols and Members of the Board  
California Air Resources Board  
Headquarters Building  
1001 "T" Street  
P.O. Box 2815  
Sacramento, CA 95812

RE: Comments on AB 32 Proposed Scoping Plan to Reduce Global Warming Pollution

Dear Chair Nichols and Members of the California Air Resources Board:

On behalf of the Center for Biological Diversity, the Center on Race, Poverty & the Environment, the Environmental Defense Center, and Food & Water Watch, we offer the following comments on the Proposed Scoping Plan and its Appendices.<sup>1</sup> We fully support the development and implementation of a Scoping Plan that fulfills the ambitious and laudable mandate of the California Global Warming Solutions Act of 2006 (hereinafter "AB 32") to achieve maximum feasible and cost-effective reductions. The Proposed Scoping Plan as written has many important components that contribute to this goal, most notably the proposal to increase the Renewable Portfolio Standard to 33% by 2020, as well as expanding and strengthening existing energy efficiency programs and building and appliance standards. AB 32 requires that this type of aggressive technology-forcing mandate be extended throughout the Scoping Plan. Unfortunately, the Proposed Scoping Plan lacks similar mandates for the industrial and agricultural sectors.

With the passage of AB 32, California adopted a comprehensive global warming law that sets aggressive standards for achieving greenhouse gas reductions. As the Proposed Scoping Plan recognizes, AB 32 is a landmark law intended to fundamentally change business as usual and put California's economy on path to a low carbon future.<sup>2</sup>

A cornerstone requirement of AB 32 is that Air Resources Board ("ARB") must adopt measures that achieve the maximum technologically feasible and cost-effective reductions.<sup>3</sup> ARB Staff explicitly recognized the Scoping Plan must "include maximum technologically feasible and cost-effective emission reductions," at the November 20, 2008, ARB Board

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<sup>1</sup> The Proposed Scoping Plan and its Appendices are separate documents. This comment addresses both simultaneously. For references purposes, the Proposed Scoping Plan is referred to as "PSP" and each Appendix with corresponding volume number as "PSPA."

<sup>2</sup> PSP at ES-2.

<sup>3</sup> See, e.g., Health and Safety Code § 38560.

Meeting.<sup>4</sup> Despite this recognition, nowhere in the Plan does ARB identify the total potential universe of emission reductions that meet this criteria. Rather than identifying the universe of total reductions required by the Act, ARB used the 2020 emissions limit as a target and, thus, as an approximate ceiling for the amount of reductions to be achieved by the scoping plan. For example, the Proposed Scoping Plan excludes technologically feasible and cost-effective regulatory measures that were under consideration in the Draft Scoping Plan.<sup>5</sup> This is directly contrary to the explicit obligation that the scoping plan must achieve “the *maximum* feasible and cost-effective reductions of greenhouse gas emissions by 2020.”<sup>6</sup>

As the presentation from the Climate Action Team at the Nov. 20, 2008, Board Meeting made clear, the longer the delay in emission reduction targets, the more costly and harder to achieve the reductions will be. We respectfully urge the ARB Board to adopt a Scoping Plan that fully implements the mandates of AB 32. The Proposed Scoping Plan should be approved only after the following modifications are made:

- 1) The Scoping Plan must include the maximum amount of reductions achievable by 2020.
- 2) The Final Scoping Plan must include an identifiable method for achieving maximum reductions that are technologically feasible and cost-effective.
- 3) Where a market compliance or alternative mechanism such as the cap-and-trade system is proposed for certain sectors, the reductions must be at least equivalent to the sum of maximum technologically feasible and cost-effective emission reduction’s achievable in those sectors.
- 4) Any plan for a cap-and-trade program adopted by CARB must meet the requirements of AB 32.

The legal analysis underpinning this letter was previously provided to the Board and its staff in our comment letter on the Draft Scoping Plan, dated August 11, 2008. That letter identified three primary deficiencies in the Draft Scoping Plan: first, the Draft Scoping Plan improperly used the 2020 greenhouse gas emission limit as a ceiling on the amount of greenhouse gas emission reductions required to be achieved by 2020; second, the Draft Scoping Plan ignored that AB 32 requires “maximum technologically feasible” emission reductions; and third, that the proposal to link to Western Climate Initiative’s cap and trade system was inconsistent with the requirements of AB 32. Unfortunately, the Proposed Scoping Plan does not

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<sup>4</sup> ARB Staff Powerpoint Presentation, “Climate Change Proposed Scoping Plan: A Framework for Change” (Nov. 20, 2008).

<sup>5</sup> See, e.g., Comment Letter of Dr. Alan Lloyd and Dr. Bob Epstein, Re: Proposed AB32 Scoping Plan and Economic Evaluation (Nov. 12, 2008), at 2 and Enclosure III, Table III-2.

<sup>6</sup> Health and Safety Code § 38561(b), emphasis added.

adequately address the issues raised in that letter and still suffers from these flaws. For convenience, this letter incorporates the legal analysis from that comment letter.

**I. AB32 REQUIRES THE SCOPING PLAN TO INCLUDE THE “MAXIMUM FEASIBLE” REDUCTIONS OF GREENHOUSE GAS EMISSIONS.**

The scoping plan that ARB adopts must achieve the “maximum feasible” reductions.<sup>7</sup> Rather than surveying the maximum amount of feasible reductions from every sector and summing the amount of feasible reductions, ARB improperly uses the statewide emissions limit as the target for the amount of reductions to be achieved by the Scoping Plan. The Draft Scoping Plan proposed measures that were intended to achieve in aggregate the exact amount of emission reductions necessary to meet the statewide emissions limit.<sup>8</sup> The Proposed Scoping Plan takes a slightly different tack by including a “Margin of Safety for Uncapped Sectors” of an additional reduction of 5 million metric tons of carbon dioxide equivalent emissions (“MMTCO<sub>2</sub>E”).<sup>9</sup> “The total reduction for the recommended measures slightly exceeds the 169 MMTCO<sub>2</sub>E of reductions estimated in the Draft Scoping Plan. This is the net effect of adding several measures and adjusting the emission reduction estimates for some other measures. The 2020 emissions cap in the cap-and-trade program is preserved at the same level as in the Draft Scoping Plan (365 MMTCO<sub>2</sub>E).”<sup>10</sup> The margin of safety is designed to ensure that ARB meets the statewide emissions limit, which is an essential requirement of AB 32 and must be met, but there is no indication that the “margin of safety” is designed to achieve the maximum feasible reductions. In fact, the adoption of this margin indicates that ARB may have other potential reductions that it chose not to include in the Scoping Plan. In many cases, these measures have been analyzed subsequent to the Draft Scoping Plan and were not found to be infeasible or not cost-effective, but were nonetheless excluded from the Proposed Scoping Plan.

AB 32 requires the Scoping Plan to do more than merely achieve the “floor” of emission reductions set by the statewide emissions limit. The “statewide emissions limit” in the Scoping Plan represents the *minimum* amount of reductions required to be achieved by 2020. Health and Safety Code § 38505(n) defines “statewide emissions limit” as “the *maximum allowable level* of statewide greenhouse gas emissions in 2020.” (emphasis added). By defining the statewide emissions limit as “the maximum allowable level of emissions in 2020,” AB 32 sets a floor, not a ceiling, on the amount of greenhouse gas emission reductions. Health and Safety Code § 38550 requires that California’s 1990 emissions level be achieved by 2020, but this provision does not limit the amount of reductions to be achieved. In fact, it contemplates that the emission reductions may likely be greater than those needed to achieve the statewide emissions limit. Setting a “maximum allowable” emissions level indicates a minimum amount of reductions required, not a maximum. The Proposed Scoping Plan’s provision for a margin of safety implicitly recognizes that ARB has the authority to develop a Scoping Plan that exceeds the

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<sup>7</sup> Health and Safety Code § 38561(b).

<sup>8</sup> Draft Scoping Plan (“DSP”) at 11.

<sup>9</sup> PSP at ES-4, 2

<sup>10</sup> PSP at 16.

statewide emissions limit. Not only can additional reductions be included, but these reductions are required to be included if they are feasible.

The statute is clear that the Scoping Plan instead must achieve the maximum feasible reduction in greenhouse gas emissions. Health and Safety Code § 38561 sets the parameters for the Scoping Plan. Subsection (b) explicitly states that the plan “shall identify and make recommendations” on a range of emission reduction strategies “to facilitate the achievement of the *maximum feasible* and cost-effective reductions of greenhouse gas emissions by 2020.” (emphasis added). ARB does not have the authority to limit the amount of reductions to the equivalent of the statewide emissions limits plus a small “margin of safety.” In fact, the Legislature intended “that the statewide greenhouse gas emissions limit continue in existence and be used to maintain and continue reductions in emissions of greenhouse gases beyond 2020.”<sup>11</sup> ARB is tasked with designing a plan that at a minimum will achieve the statewide emissions limit. However, ARB cannot neglect to pursue feasible reductions based on the projection that the additional reductions could potentially reduce emissions below the statewide emissions limit.

Subsections (a) and (h) of section 38561, that define the requirements of the scoping plan, are consistent with this interpretation. Health & Safety Code § 38561(a) requires ARB to adopt a scoping plan “for achieving the *maximum technologically feasible* and cost-effective reductions in greenhouse gas emissions from sources or categories of sources of greenhouse gases by 2020 under this division.” (emphasis added). Subsection (h) parallels this language and requires ARB to “update its plan for achieving the maximum technologically feasible and cost-effective reductions of greenhouse gas emissions at least once every five years.” The statute requires all the reductions that are technologically feasible, *i.e.* the maximum amount. The maximum technologically feasible standard thus creates a mechanism for achieving the most reductions possible.

This interpretation is also consistent with the structure of AB32. Part 4, the section entitled “Greenhouse Gas Emissions Reductions,” begins with a provision that applies to all rules and regulations adopted pursuant to AB32 including the Scoping Plan. Health and Safety Code section 38560 requires ARB to “adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective greenhouse gas emission reductions from sources or categories of sources, subject to the criteria and schedules set forth in this part.” The Scoping Plan and every regulation adopted pursuant to AB32 are required to achieve both “maximum technologically feasible” and “cost-effective” reductions. The same requirement also applied to the early action measures. Health and Safety Code § 38560.5(c)

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<sup>11</sup> Health and Safety Code § 38551(b).

## **II. ARB HAS FAILED TO IDENTIFY THE MAXIMUM TECHNOLOGICALLY FEASIBLE REDUCTIONS.**

As discussed above, ARB has a statutory mandate to adopt “maximum technologically feasible” reductions. These can be accomplished by control measures or aggressive performance standards that force technological innovation. ARB inexplicably ignores this requirement and does not include it as a basis for evaluation for the Scoping Plan. By doing so, ARB removes an essential statutory standard for evaluating the Scoping Plan and undermines the strength of AB 32. ARB recognizes “that a business-as-usual approach toward greenhouse gas emissions is no longer acceptable,” and that achieving the goals of AB 32 will “involve every sector of the state’s \$1.7 trillion economy and touch the life of every Californian.”<sup>12</sup> Yet, by refusing to even explore the maximum technological and cost-effective reductions for the relevant sectors of the economy, ARB fails to fulfill its statutory mandate.

ARB’s failure to adhere to this mandate is on stark display in ARB’s discussion of its decision to not include a heavy-duty engine efficiency measure. The Draft Scoping had included a proposal for a heavy duty truck engine efficiency measure.<sup>13</sup> ARB eliminated this measure from the Proposed Scoping Plan and stated that ARB would “consider setting requirement and standards for heavy-duty engine efficiency, if higher level of efficiencies are not being produced either in response to market forces (fuel costs) or federal standards” (which have not been developed).<sup>14</sup> Not setting a maximum technological standard for heavy-duty truck engine efficiency is not only contrary to AB 32, but also contrary to the spirit of the Scoping Plan’s reliance on the Pavley Vehicle Standard. The Proposed Scoping Plan states that “AB 1493 (Pavley, Chapter 200, Statutes of 2002) directed ARB to adopt vehicle standards that lowered greenhouse gas emissions to the maximum extent technologically feasible, beginning with the 2009 model year.”<sup>15</sup> The Pavley requirements are similar to the technology forcing standard in AB 32. However, with respect to heavy truck engine efficiency, ARB did not set a standard. Instead, ARB hopes that these reductions will result from events beyond its control.

Similarly, the Proposed Scoping Plan proposes no mandatory reductions for the agricultural sector even though emissions from this sector constitute six percent of California’s total greenhouse gas emissions and these emissions are projected to increase by 2020.<sup>16</sup> Rather, ARB effectively exempts this sector, instead relying on voluntary reductions. ARB arbitrarily chose not to regulate the agricultural sector even though technologically feasible reductions exist.<sup>17</sup> This approach is contrary to AB32.

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<sup>12</sup> PSP at 1.

<sup>13</sup> DSP30; DSPA C-34.

<sup>14</sup> DSPA C-34.

<sup>15</sup> PSP at 39.

<sup>16</sup> PSPA Vol. I at C-192-93.

<sup>17</sup> Several examples of available controls include but are not limited to: 1) electrification of agricultural internal combustion engines; 2) irrigation pump efficiency testing and improvements; and 3) solar installations that replace local combustion sources such as irrigation pumps.

The flaw in ARB's approach is also illustrated by the arbitrary allocation of 34.4 MMTCO<sub>2</sub>e of greenhouse gas emission reductions to a proposed cap and trade program. AB32 authorizes ARB to adopt a cap and trade system if ARB "determines" that it "will achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions, in the aggregate, from those sources or categories of sources." Health and Safety Code § 38562(c). Yet, instead of determining the maximum feasible reductions that can be achieved by these capped sectors, the Draft Scoping Plan "backed into" the emission reductions to be achieved by treating the trading program as the gap filler to achieve whatever additional reductions are left to meet the statewide emissions limit after the implementation of other controls. This approach abandoned the possibility that the Draft Scoping Plan would achieve the maximum feasible reductions by 2020. By maintaining the same amount of reductions attributed to the cap and trade program in the Proposed Scoping Plan, ARB still arbitrarily limits the amount of reductions that can occur in the capped sectors.

ARB should have used the dual standard of maximum technologically feasible and cost-effective reductions as a screen for identifying the maximum feasible reductions achievable.<sup>18</sup> This universe of reductions should have been the target for emission reductions to be achieved by the Proposed Scoping Plan. Once this universe had been identified, a cap and trade program, consistent with AB 32, could be developed that achieves the "aggregate" emission reductions from the "categories of sources" included in the cap and trade program.<sup>19</sup> Without this evaluation, ARB cannot show that its cap and trade program and hence, its Proposed Scoping Plan, will meet the maximum technologically feasible and cost-effective reduction mandate.

AB32 contemplates a thorough review of the maximum technologically feasible reductions. In a letter to ARB dated May 4, 2007 and reiterated in our Aug. 11, 2008, letter, we emphasized that ARB must use the maximum technologically feasible standard when assessing the early action measures. That letter stated:

There is no evidence of any systematic review of GHG sources in the State or any survey of the controls that could be, or already have been, adopted for these sources. For example, we know that local air districts regulate a number of source categories that are significant GHG emitters, such as dairies, composting facilities, stationary engines, and flares. Local controls of these sources vary from air district to air district resulting in disparate controls of GHG emissions. As an initial step, ARB should review the controls already in place at GHG sources to identify the local rules that are currently achieving the greatest reduction in GHG emissions. These are measures that have already been demonstrated as

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<sup>18</sup> ARB has a statutory obligation to assess each of the technologies proposed if a technology is technically feasible, and it must be included in the draft scoping and assessed for cost-effectiveness. AB32 requires ARB to "rely upon the best available economic and scientific information and its assessment of existing and projected technological capabilities." Health and Safety Code § 38562(e).

<sup>19</sup> See Health and Safety Code § 38562(c).

technically feasible and could easily be implemented statewide. ARB should further assess whether the emission reductions required by those rules represent the “maximum technologically feasible and cost-effective reductions” in GHG emissions, and, if not, propose necessary improvements.

With the early action measures ARB never did make a maximum technologically feasible assessment or a review of local control measures. While the short time-frames of those early action measure decisions may have made such a systematic review difficult, ARB has no such excuse for its refusal to conduct this review for the Scoping Plan.

ARB has now had the benefit of public input over many months on a wide array of potential emission reduction measures. In fact, AB32 mandated this input: ARB must “adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective greenhouse gas emission reductions from sources or categories of sources.” Health and Safety Code § 38560. ARB cannot simply take public comment and then arbitrarily reject measures based on criteria that are not enumerated in the statute. If ARB once again ignores technically feasible emission reductions, it will violate both the letter and intent of the legislative requirement for “an open public process,” as well as the requirement that greenhouse gas emission reductions be based on maximum feasible technology.

Commenters have identified direct measures that are both technologically feasible and cost-effective. In a letter dated November 12, 2008, Dr. Alan Loyd and Dr. Bob Epstein identified 14 measures that were not included in the Proposed Scoping Plan that would achieve reductions of up to 29.9 MMTCO<sub>2</sub>e.<sup>20</sup> Market barriers have prevented these reductions from occurring even though without a price on carbon these measures would save \$3 billion per year if implemented today; putting a price on carbon through a cap and trade program would not eliminate the market barriers that have already prevented this reduction.<sup>21</sup> In addition, NRDC recommended improvement to Industrial Audit Measure I-1, which would result in an estimated 10 MMTCO<sub>2</sub>e reductions.<sup>22</sup>

The Draft Scoping Plan had previously considered a carbon intensity standard for cement manufacturers and a carbon intensity standard for concrete batch plants, which were projected to achieve combined reductions of up to 6 MMTCO<sub>2</sub>e and estimated to have net annualized costs of -\$3 million and \$0, respectively. However, without an explanation based on cost or feasibility both of these measures were excluded from the Proposed Scoping Plan, as were all specific measures to achieve reductions from the cement and other industries.

ARB must incorporate into the Scoping Plan any technologically feasible and cost-effective measures that would lead to greater reductions in greenhouse gas emissions. These

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<sup>20</sup> Comment Letter of Dr. Alan Loyd and Dr. Bob Epstein, Re: Proposed AB32 Scoping Plan and Economic Evaluation (Nov. 12, 2008), at 2 and Enclosure III, Table III-2.

<sup>21</sup> *Id.* at 2.

<sup>22</sup> NRDC Comment Letter (Nov. 18, 2008) at 10-11.

measures should include all technologically feasible and cost-effective measures ARB designated as voluntary early action measures, all measures proposed as voluntary under the Proposed Scoping Plan, and all technologically feasible and cost-effective measures considered by ARB but were excluded from the recommendations of the draft Scoping Plan.

ARB cannot reject a measure that is technologically feasible and cost-effective, based solely on the projections of economic modeling that may show that the combinations of other measures may achieve the minimum reductions necessary to reach the statewide emissions limit, or that the measure may to some degree eventually become voluntarily implemented under a cap and trade program. Neither can ARB reject any measure solely on the assumption that the minimum levels of emissions reductions may be achieved more inexpensively through other measures.

### **III. ARB'S PROPOSED CAP AND TRADE PROGRAM DOES NOT COMPLY WITH AB32.**

#### **A. AB32 Sets the Legal Parameters for the Design of a Cap and Trade Program.**

AB32 permits ARB to design a cap and trade program, but the system is constrained by a variety of statutory provisions. Health and Safety Code § 38562(c) permits but does not require ARB to establish a cap and trade program. It states:

In furtherance of achieving the statewide greenhouse gas emissions limit, by January 1, 2011, the state board may adopt a regulation that establishes a system of market-based declining annual aggregate emission limits for sources or categories of sources that emit greenhouse gas emissions, applicable from January 1, 2012, to December 31, 2020, inclusive, that the state board determines will achieve the maximum technologically feasible and cost-effective reductions in greenhouse gas emissions, in the aggregate, from those sources or categories of sources.

*Id.* The next subsection, (d), sets additional parameters for all regulations adopted by ARB, including the Scoping Plan and market-based compliance mechanisms. It requires the reduction to be “real, permanent, quantifiable, verifiable and enforceable by the state board” and requires that the reductions are “in addition to any greenhouse gas emission reduction otherwise required by law or regulation, and any other greenhouse gas emission reduction that otherwise would occur.” Health and Safety Code §§ 38562(d)(1) & (2). Subsection (3) applies if direct emissions regulations are replaced by market-based compliance mechanisms. If so, greenhouse gas emission reductions must occur over the same time period and be equivalent to the amount of the direct emission regulation or regulations. In addition to the requirements in section 38562, the statute has a separate section, Part 5, that provides additional requirements for market-based compliance mechanisms.



As outlined below, ARB's proposal for the cap and trade system constitutes a serious departure from the requirements of AB32. ARB proposes to link to the Western Climate Initiative ("WCI") regional cap and trade, but as currently designed, the WCI does not comply with AB32, as explained below.

**B. A Cap and Trade Program Must Achieve Compliance with Annual Declining Aggregate Emission Limits.**

The Scoping Plan fails to fulfill the fundamental requirement that the cap and trade system achieve declining annual aggregate emissions for the sources or category of sources included in the cap. Health and Safety Code §§ 38562(c), 38505(k)(1). Similarly, while the WCI proposes annual caps that purport to decline in a straight line,<sup>23</sup> the WCI allows three-year compliance periods, allowing annual emissions to rise and fall over these three-year periods as long as the average emissions comply with the set limits. The three-year compliance periods are incompatible with the requirement for a declining annual cap, because they allow variations from year to year. AB32 prohibits backsliding and requires that the emission reductions from a cap and trade system actually decline *each year*.<sup>24</sup> The only way to assure compliance with declining annual emission limits is to have annual compliance periods.

AB32 requires California to develop a cap and trade program that can assess whether the program is complying with the declining annual aggregate limit. WCI's intention to allow unlimited banking<sup>25</sup> violates this requirement. Allowing the use of banked credits means that emissions would be allowed to actually *increase* in future years. This "flexibility" contravenes AB32's requirement for declining annual aggregate emission limits, because there is no way to control when the banked credits will be used. On its face, allowing unlimited banking will not ensure compliance with declining annual aggregate limits, and thus, does not comport with AB32.

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<sup>23</sup> Western Climate Initiative Design Recommendations for the WCI Regional Cap-and-Trade Program (Sept. 23, 2008) ("WCIDR") at 4.

<sup>24</sup> Health and Safety Code § 38562(c). Both RECLAIM in the South Coast Air Quality Management District and the European Emissions Trading System had increases in regulated pollutants in their initial years. The legislature in AB32 wisely intended to prevent this possibility.

<sup>25</sup> WCIDR at 9. WCI makes one exception to unlimited banking; it limits banking "to the extent that restrictions on the number of allowances any one party may hold are necessary to prevent market manipulation." *Id.* This standard would most likely not be proved until after the fact which in essence defeats the purpose of the restriction, because the banked credits would have already been accumulated and misused. California's experience with the "energy crisis" demonstrates valid reasons to fear market manipulation, but this requirement provides nothing more than rhetoric.

**C. Maximum Technological Feasibility Must Be Assessed Before ARB Employs Any Flexible Compliance Mechanisms.**

ARB must determine whether reductions from the covered sectors in the cap and trade program will achieve reductions that are at least equivalent to those that could be achieved through direct regulation. However, ARB has not presented this analysis. To the contrary, the CEQA evaluation states that “ARB cannot predict in which sectors and in what geographic locations these reductions would occur.”<sup>26</sup>

By relying almost solely on the cap and trade program to achieve the reductions from the industrial sectors, ARB abdicates its ability and responsibility to ensure maximum. This approach conflicts with ARB’s own description of its regulatory approach, which is to include a cap and trade program “complemented by technology-forcing performance standards.” It also is undermined by ETAAC’s conclusion that “placing a price on GHG emissions addresses only one of the many market failures that impede solutions to climate change. Additional market barriers and co-benefits would not be addressed if a cap and trade system were the only state policy employed to implement AB 32. Complementary policies will be needed to spur innovation, overcome traditional barriers . . . and address distributional impacts from possible higher prices for goods and services in a carbon constrained world.” Within the industrial sectors ARB has made at least an implicit decision that the cap and trade program can capture almost all of the reductions from the industrial sector and that no market barriers stand in the way. Regulation of these sectors stands in marked contrast to the electricity sector where ARB required both an increased RPS and more efficiency measures in addition to the cap and trade program. ARB should similarly adopt direct regulatory measures for the industrial sectors in addition to requiring reductions from the cap and trade program.

The proposed WCI banking provisions are also inconsistent with AB 32 because ARB failed to assess the reductions that can be achieved from direct regulations in the sectors to be covered by the cap. Health and Safety Code § 38505(k)(2) states that banking is allowed to the extent it “result[s] in the same greenhouse gas emission reduction, over the same time period, as direct compliance with a greenhouse gas emission limit or emission reduction measure adopted by the state board pursuant to this division.” Thus, any banking system that is created pursuant to AB 32 must be compared to the potential reductions that can be achieved from direct regulation.

Maximum technological feasibility must be assessed as a prerequisite to any “market-based compliance mechanism.” In addition to a cap and trade system, ARB indicates that individual direct regulations, such as the low carbon fuel standard, will incorporate flexible market-based compliance mechanisms.<sup>27</sup> As with the banking flexibility discussed above, these alternative compliance mechanisms must be analyzed in relation to the potential direct regulation

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<sup>26</sup> PSPA Vol. III at J-86.

<sup>27</sup> PSP at 66.

covering the same source or sources on which a flexible system is adopted.<sup>28</sup> By defining these mechanisms in relation to direct emission reductions, the statute requires an assessment of maximum technologically feasible reductions and cost-effectiveness for every proposed emission reduction even if ARB plans to achieve those emission reductions by a “market based compliance mechanism” or an “alternative compliance mechanism.”

In order to adopt a cap and trade program and, for that matter, banking, ARB must assess the potential reductions for each category of sources to be included in the cap. To make this determination, ARB must analyze the maximum technologically feasible reductions that would be replaced by the trading system. As discussed, ARB has not presented this analysis in either the Draft or Proposed Scoping Plan.

**D. The WCI Proposal has Additional Problems that Make it Incompatible with AB32.**

Linkage of WCI to the cap and trade program will not produce the promised reductions because WCI proposes to set an inflated baseline. Currently, WCI sets the initial cap “at the best estimate of expected actual emissions for those sources covered in the initial year of the program (i.e., 2012).”<sup>29</sup> This baseline methodology encourages covered sources to start increasing emissions before the start of cap. Furthermore, the baseline may be over-allocated because it fails to account for the reductions that will occur from direct controls in the covered sectors. As presently described, the baseline is established for each three-year compliance period based on actual emissions at the start of each compliance period.<sup>30</sup> This baseline does not account for reductions resulting from any direct regulations in the covered sectors, such as implementation of the RPS standard. Since these reductions are not subtracted from the baseline, the allocations decisions will be based on an inflated baseline, because reductions within the cap will occur independently of the cap and trade program. This baseline is contrary to AB32’s requirement that reductions from a cap and trade system must be “in addition to any greenhouse emission reduction otherwise required by law or regulation, and any other greenhouse gas emission reduction that otherwise would occur.” Health and Safety Code § 38562(d)(2). Furthermore, under the WCI, this problem cannot entirely be solved even if ARB developed a more adequate baseline for California sources, because California would still be subject to the inappropriately inflated baselines used in other states through the interstate trading in carbon credits.

As currently constituted, the WCI program will stifle technological innovation and even the use of the existing technology necessary to make the maximum feasible reductions in the same way that the RECLAIM program did in Southern California. Like the proposed WCI program, RECLAIM began with an over-allocated baseline that created inexpensive credits that allowed companies to avoid employing best available control technologies. Emissions actually increased during the first two years of the program. The credit market that arose did not

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<sup>28</sup> See Health and Safety Code §§ 38505(b) and 38505(k)(2).

<sup>29</sup> WCIDR at 4.

<sup>30</sup> *Id.*

encourage the widespread use of best available control technology.<sup>31</sup> Eventually, to achieve greater emission reductions, the South Coast Air Quality Management District had to institute a rule that required best available control technology. ARB's proposal to provide "low-cost" reductions that have no relationship to the amount of reductions that can be achieved by maximum feasible technology is a recipe for repeating the flaws of RECLAIM.<sup>32</sup>

If a goal of the trading system is to encourage technological innovation, it is necessary to account for the reductions that can occur from the use of maximum feasible technology, because any reductions above the projected level would truly be additional and would demonstrate that the price signal set by the market encouraged the innovation. On the other hand, if the cap and trade program is over-allocated, this will reduce the allowance price and associated price signals, thereby undermining incentives for innovation and even for known control technologies.<sup>33</sup>

Similarly, ARB's and WCI's proposal to allow 49 percent of the required reduction of emissions for compliance with the cap and trade program to occur from offsets must only be considered after an evaluation of direct regulation.<sup>34</sup> The Proposed Scoping Plan argues that "[t]his quantitative limit will help provide balance between the need to achieve meaningful emissions reductions from capped sources with the need to provide sources within capped sectors the opportunity for low-cost reduction opportunities that offsets can provide."<sup>35</sup> However, there is no analysis of whether 49% will achieve this desired outcome. In fact, according to Executive Officer Goldstone the 49% was "a product of extensive negotiations with the Western Climate Initiative trying to come to a number."<sup>36</sup> On its face, if 49% of reductions in the capped sectors were to come from offsets, there would be significantly smaller reductions in these sectors, and they would do much less to encourage the adoption of new technologies in the capped sectors.<sup>37</sup>

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<sup>31</sup> See, Richard Toshiyuki Drury, Michael E. Belliveau, J. Scott Kuhn, and Shipra Bansal, "Pollution Trading and Environmental Injustice: Los Angeles' Failed Experiment in Air Quality Policy, 9 Duke Env'tl. L. & Pol'y F. 231, 263-68. (Spring 1999).

<sup>32</sup> The legislature clearly had considered RECLAIM and its problems when it set legal parameters on the scope on any carbon trading program authorized by AB 32. It is incomprehensible that ARB has not provided a thorough analysis of RECLAIM, the significant pollution trading program that has been operating in California. ARB appears intent on ignoring the fact that cap and trade programs do not necessarily work as advertised. Luckily, AB 32 set specific parameters to avoid some of the classic problems with trading programs. It is incumbent on ARB to implement these restrictions.

<sup>33</sup> ARB also makes the unsubstantiated statement that reductions from the cap and trade are the most cost-effective, but there is no analysis. Without first determining the cost of the potential direct regulation or regulations, there can be no comparison of whether the regulation or the cap and trade system is most cost-effective. Moreover, ARB's discussion of its trading program appears to be premised on a perfect theoretical market where all participants have complete and transparent information about the availability of cost and credits and where the market power of none of participants can affect the market. ARB assumes that a cap and trade program will accomplish the estimated emission reductions, but the real world function of these programs does not provide a solid foundation for ARB's assumption.

<sup>34</sup> See Health and Safety Code § 38505(k)(2).

<sup>35</sup> PSP at 37.

<sup>36</sup> Nov. 21 Board Meeting Transcript at 39.

<sup>37</sup> ARB also argues that "[o]ffsets can also encourage the spread of clean, low carbon technologies outside

Moreover, ARB seems intent on providing offsets from sectors that it did not regulate or include under the cap. For example, the Draft Scoping Plan considered a number of reduction measures for the agricultural sector, including methane capture at large dairies, which was estimated to provide 1 MMTCO<sub>2</sub>E at a negative annual cost. In contrast, the Proposed Scoping Plan included no mandatory measures for the agricultural sector at all. Yet, without an analysis of maximum technologically feasible reductions in all sectors including those outside the cap, ARB will not be able to show that the credits comply with Health and Safety Code § 38562(d). Credits do not become additional because ARB simply decided not to regulate certain sectors or sources. A recent General Accounting Office (“GAO”) report concludes that “[a] key requirement of offset programs is that issued credits represent real and additional emission reductions. If this condition is not fulfilled, the use of offset credits in mandatory emission reduction programs can undermine the environmental integrity of efforts to meet emission targets.”<sup>38</sup>

The very nature of a regional cap and trade program, where credits are generated in other states and then traded into California, raises enforceability issues; it is not obvious how ARB would be able to enforce the validity of credits generated in another state or a Canadian province. Yet, Health and Safety Code § 38562(d)(1) requires that the cap and trade program be enforceable by ARB. As ARB is well aware, WCI cannot create a trading system where states have enforcement powers outside their jurisdictional boundaries, because this type of arrangement would raise constitutional issues. Before including a cap and trade system in the Scoping Plan, ARB must explain how WCI will be enforceable by ARB.<sup>39</sup>

#### **IV. THE SCOPING PLAN SHOULD INCLUDE A PROVISION THAT PROVIDES FOR CITIZEN ENFORCEMENT OF ARB’S EMISSION REDUCTION REGULATIONS.**

Continued public involvement and support will be necessary for the successful implementation of the greenhouse gas emission reduction programs created pursuant to AB 32. After the completion of the Scoping Plan, ARB will begin rulemakings to enact the proposed regulations. These rulemakings will be open to public involvement and, as the Scoping Plan

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California.” (PSP at 37.) But the larger supply of offsets in the capped sectors reduces the innovation occurring in California.

<sup>38</sup> GAO Report, “International Climate Change Programs: Lessons Learned from the European Union’s Emissions Trading Scheme and the Kyoto Protocol’s Clean Development Mechanism” (Nov. 2008) GAO-09-151, at 52 (Attachment 1).

<sup>39</sup> Health and Safety Code section 38562(d) requires that the Scoping Plan be in compliance with each of its three provisions including enforceability. It states “[a]ny regulation adopted by the state board pursuant to this part or Part 5 (commencing with Section 38570) shall ensure all of the following.” This part refers to Part 4, which includes Health and Safety Code section 38561, the provision defining the contents of the Scoping Plan. Thus, ARB must include discussion of enforcement in the Scoping Plan and not defer this discussion to some future time after the Scoping Plan has been adopted.

process has demonstrated, participation will most likely continue at a high level. Once ARB has completed some rulemakings, ARB will have the responsibility to both continue developing emission reductions as well as enforce the measures that it has adopted. In addition, if ARB does eventually adopt a cap and trade program, ARB will be required to develop a whole new system for enforcing financial transactions, which will be fundamentally different than ARB's traditional enforcement mechanisms. ARB's resources will be stretched thin.

Citizen enforcement of the regulations promulgated by ARB can extend the resources of the State and provide more incentive for the regulated industries to comply with the required emission reductions. AB 32 provides ARB with the authority in the Scoping Plan to identify and make recommendations on "monetary and non-monetary incentives" "necessary or desirable to facilitate the maximum feasible and cost-effective reductions of greenhouse gas emissions by 2020." Health and Safety Code § 38561(b). ARB should use this authority to evaluate and recommend that citizens should have a statutory right to enforce the emission reductions measures that ARB adopts. As ARB is well aware, citizen enforcement has been integral ingredient in the success of reducing air pollution in California. In addition, the California League for Environmental Enforcement Now ("CLEEN") published a report that documents the positive influence that private enforcement of environmental laws has had in promoting public health and the environment; the report entitled "Protecting California's Public Health and Environment through Citizen Action" provides a persuasive case for citizen enforcement.

ARB should include in the final Scoping Plan a recommendation to the legislature that it adopt a law that clarifies that private citizens have the ability to enforce every greenhouse emission reduction regulation adopted pursuant to AB 32. This law could be based on the model of Federal Clean Air Act's private right of action. This law would promote an engaged public and would provide an extra assurance that greenhouse gas emission reductions will be implemented by regulated entities. In contrast, it would be an ironic twist if the public was only encouraged to participate in the rulemakings and then asked to stand aside and hope that these regulations will be successfully implemented.

## **V. CONCLUSION: THE IMMEDIACY OF THE THREAT FROM GLOBAL WARMING DEMANDS STRINGENT ADHERENCE TO AB32.**

Global warming is already occurring, and it is caused by human activity.<sup>40</sup> With each passing day, the urgency to make immediate greenhouse gas reductions becomes greater. The scientific evidence and projections continue to reveal that the effects of global warming are occurring at rates faster than predicted.<sup>41</sup> The global climate is on the verge of catastrophic tipping points that could irreversibly affect the climate.<sup>42</sup> It is, therefore, imperative that ARB

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<sup>40</sup> "Climate Change 2007: The Physical Science Basis, Summary for Policy Makers" (Fourth Assessment Report of the IPCC, February 2007).

<sup>41</sup> David Adam, "World CO2 levels at record high, scientists warn," guardian.co.uk (May 12, 2008) at <http://www.guardian.co.uk/environment/2008/may/12/climatechange.carbonemissions> (last visited July 8, 2008).; CNN World News, *North Pole Could Be Ice-Free This Summer, Scientists Say* (June 27, 2008), at

correctly interpret AB32 to require the maximum feasible reductions. ARB must use the statutory power it was given to curb greenhouse emissions as soon as possible.

Sincerely,

A handwritten signature in black ink, appearing to read "William Rostov", with a long horizontal flourish extending to the right.

William Rostov  
Staff Attorney  
Earthjustice

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<http://www.cnn.com/2008/WORLD/weather/06/27/north.pole.melting/> (last visited July 8, 2008); see also *Global and regional drivers of accelerating CO2 emissions*, Michael R. Raupach et al., 104 Proceedings the National Academy of Sciences 24 (June 2007), p. 2 (Attachment 2).

<sup>42</sup> James Hansen, "Tipping Point: Perspective of a Climatologist," in *State of the Wild 2008-2009; A Global Portrait of Wildlife, Wildlands, and Oceans*, Wildlife Conservation Society (Kent Redford, Eva Fearn eds., April 2008) (Attachment 3). See also Bill McKibben, "Civilization's last chance," L.A. Times (May 11, 2008) at <http://www.latimes.com/news/printedition/opinion/la-op-mckibben11-2008may11,0,2392815.story> (last visited July 8, 2008).